

Title (en)

Removal of acid gases and sulfur compounds from hydrocarbon gas streams in a caustic tower

Title (de)

Entfernung von sauren Gasen und Schwefelbestandteilen aus Kohlenwasserstoffgasströmen in einem kaustischen Turm

Title (fr)

Élimination de gaz acides et de composés soufrés de flux de gaz d'hydrocarbures dans une tour caustique

Publication

EP 2025386 A1 20090218 (EN)

Application

EP 08013314 A 20080724

Priority

US 88844907 A 20070801

Abstract (en)

The present invention provides a process for treating a hydrocarbon feed gas stream containing acid gases (CO₂, H₂S and/or mercaptans) by contacting the feed gas stream in a multi-section caustic tower, the bottom sections employing a recirculating caustic solution to remove the CO₂ and H₂S down to low single digits parts per million concentration and the upper sections employing a stronger caustic solution on a once through basis to produce a mercaptans depleted gas stream.

IPC 8 full level

B01D 53/14 (2006.01)

CPC (source: EP KR US)

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Citation (applicant)

- WO 0044694 A1 20000803 - STONE & WEBSTER ENG CORP [US]
- US 2176196 A 19391017 - BEAMER CLAYTON M, et al
- GB 2373790 A 20021002 - COUNCIL SCIENT IND RES [IN]

Citation (search report)

- [Y] WO 0044694 A1 20000803 - STONE & WEBSTER ENG CORP [US]
- [Y] US 2176196 A 19391017 - BEAMER CLAYTON M, et al
- [Y] GB 2373790 A 20021002 - COUNCIL SCIENT IND RES [IN]
- [A] EP 1158038 A2 20011128 - BASF AG [DE]
- [A] GB 1353248 A 19740515 - STONE WEBSTER ENG CORP

Cited by

CN103237587A; EA025250B1; EA027253B1; US8894954B2; US8894955B2; WO2012076378A1; WO2012076502A1

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AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

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DOCDB simple family (application)

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